

ABSTRACT

A plasma treatment apparatus is provided, which enables to increase a treatment area and provide good treatment uniformity. This apparatus 5 comprises a pair of electrode plates having a plurality of through holes and an insulating plate having a plurality of through holes. The insulating plate is disposed between the electrode plates such that positions of the through holes of the electrode plates correspond to the positions of the through holes of the insulating plate. A plurality of discharge spaces are formed by the through 10 holes of the electrode plates and the through holes of the insulating plate. By applying a voltage between the electrode plates, while supplying a plasma generation gas into the discharge spaces, plasmas are generated simultaneously in the discharge spaces, and sprayed on an object to efficiently perform a large-area, uniform plasma treatment.